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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/676,529

10/01/2003

James M. Nagashima

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8322

7590

05/04/2005

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EXAMINER

IP, SHIK LUEN PAUL

ART UNIT

PAPER NUMBER

2837

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/676,529	Applicant(s) NAGASHIMA ET AL.	
	Examiner Paul Ip	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Nada et al (6,654,648).

With respect to claims 1, 2, 5, 9,10, 13, and 17, the patent to Nada et al discloses a technique of monitoring processor execution time in a motor controller to monitor abnormality in plurality of CPUs or controllers. Nada et al disclose at column 7 lines 42 to 66 the motors MG1 and MG2 connected to a pair driving circuits 191 and 192 constructed as a transistor inverter. The driving circuits 191 and 192 are controlled by the motor controller 260. Nada et al further disclose at column 20 lines 36-41 that:

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When the program enters this routine, the main motor control CPU 262 first input revolving speeds REV1 and REV2 of the motors MG1 and MG2 at step S300 and determines whether or not these input revolving speeds REV1 and REV2 are within a predetermined range (0 to RVmax) at step S310.

Nada et al further disclose at column 20 lines 54-62 that:

In the case where both the input revolving speeds REV1 and REV2 are within the predetermined range at step S310, on the other hand, the main motor control CPU 262 calculates required electric currents I1req and I2req, which are to be output to the first and the second motor control CPUs 264 and 266, at step S330. It is then determined at step S340 whether or not the calculated values of required electric currents I1req and I2req are within a predetermined range (0 to Irqmax). The operation of calculating the required electric currents I1req and I2req is designed to make the calculation results within the predetermined range.

Nada et al show in figure 10 the steps of: receiving motor speed data S300, comparing the received motor speed data to predetermined motor speed ranges S310, and determining a motor speed range based on the comparison S340, and modulating an inverter switching frequency of a motor controller processor based on the determined motor speed range S360 and inverters 191 and 192. The computer flow chart shown in figure 10 is in the form of computer readable codes as required by claims 9, 10; and 13.

With respect to claims 3, 4, 11, and 12, Nada et al show in figures 2 and 8 the current and voltage feedback for determining the machine terminal information.

With respect to claims 6-8 and 14-16, Nada et al disclose at column 7 line 42 to line 66 that the inverters of driving circuits 191 and 192 are controlled by the motor controller 260 according to the program steps as shown in figure 10 of the flow diagram for determining the speed range of the motors. Nada et al further disclose at columns 15 and 16 the use of an EEPROM 282 for recording the computer codes. The EEPROM 282 is determined the same as the BIO as recited in the claims.

Response to Arguments

3. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection. Claims 1-17 recite a method comprising the steps of : receiving motor speed data; comparing the received motor speed data to predetermined motor speed ranges; determining a motor speed range based on the comparison; and modulating an inverter switching frequency of a motor controller processor based on the determined motor speed range. Applicants should realize that the use of speed range for determining the control range of the motor is notorious old in the art.

Citation of Pertinent References

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Yoshino et al (5,298,840) and Yamamoto et al (2004/0134698) disclose motor control within the allowable range.

Communication Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Ip whose telephone number is (571)-272-1941.

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The examiner can normally be reached on Monday to Friday from 6:30 am to 3:00 pm Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin, can be reached on (571)-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul Ip
Primary Examiner
AU 2837